

# BEST AVAILABLE COPY

## REMARKS

Claims 1 and 5-23 are pending in the application. In an Office Action mailed December 29, 2005, Claims 1-8, 11, 13-19 and 21-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Andrews et al. (WO 01/77669 A1) in view of Aune et al. (U.S. Patent No. 5,023,805); Claims 9, 10 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Andrews et al. in view of Aune et al., and further in view of Wang et al. (WO 02/060662 A2) and Pellerin et al. (U.S. Patent No. 5,024,091); and Claims 12 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Andrews et al. in view of Aune et al., and further in view of Larsson et al. (U.S. Patent No. 6,347,542 B1).

By the present Amendment, Applicants amended Claims 1, 5-11, 13, 14, 17 and 21 and canceled Claims 3 and 4. In view of the above claim amendments and the remarks that follow, Applicants respectfully submit that Claims 1 and 5-23 are in condition for allowance. Notice to that effect is requested.

### The Rejections Under 35 U.S.C. §103(a)

Claims 1-8, 11, 13-19 and 21-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Andrews et al. (WO 01/77669 A1) in view of Aune et al. (U.S. Patent No. 5,023,805). Applicants assert that the rejection of these claims is improper for the reasons that follow.

Claim 1 has been amended to define a method of calculating an average value of a modulus of elasticity of a dried wood-containing board. The method comprises the steps of: measuring the density of the board by detecting radiation absorption in the object; measuring the velocity of sound wave propagating through the board; and calculating the average value of the modulus of elasticity of the board using the density and sound wave velocity measurements. Independent Claims 14 and 17 also define calculation of an average value of modulus of elasticity of a dried wood-containing product.

Andrews et al. do not teach or suggest a step of calculating an average value of a modulus of elasticity. In fact, on page 5, lines 19-22, the application states that "In the method of the invention an acoustic or sonic velocity measure obtained for a log or cant is combined with a radial density profile... to derive a radial profile of its [modulus of elasticity], **not just a single value**". Clearly, Andrews is teaching a concept directly opposed to that defined in independent Claims 1, 14 and 17, namely, the calculation of an average value of a modulus of elasticity. Aune et al. are relied upon merely to teach the utilization of an x-ray scanner in the log or timber

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processing industry. Clearly, the combination of teachings of Andrews et al. and Aune et al. cannot achieve the invention as defined in Claims 1, 14, and 17. Nor is there motivation to combine Aune et al. with Andrews et al. to achieve a step of calculating an average value of modulus of elasticity of a wood-containing product.

In addition, Claims 1, 14 and 17 define calculation of modulus of elasticity for a dried wood-containing product. Andrews et al., in contrast, teaches calculation of a modulus of elasticity profile for wet, or green lumber. For example, on page 9, lines 1-3, Andrews et al. teach "The preferred procedure is intended for use with green or undried wood, first because sawing decisions clearly relate to green timber, and second because the water content at this stage largely determines the density.". Clearly, Andrews et al. teach away from Claims 1, 14 and 17 as amended. Aune et al. cannot be combined with Andrews et al. to remedy this deficiency.

Moreover, none of Wang et al., Pellerin et al., or Larsson et al., taken singly or in combination, can be combined with Andrews et al. and/or Aune et al. to achieve the invention as claimed. Namely, the combination of these references cannot achieve calculation of an average value of modulus of elasticity of a dried wood-containing product, especially since Andrews et al. teach away from such concepts.

Thus, because none of the references, taken either singly or in combination, teach or suggest the elements of independent Claims 1, 14 and 17, the rejections of these claims under 35 U.S.C. §103(a) have been overcome. Claims 5-13 depend from Claim 1; Claims 15 and 16 depend from Claim 14; and Claims 18-23 depend from Claim 17. These claims are also believed allowable as they further define limitations of their base claims.

**BEST AVAILABLE COPY****CONCLUSION**

In light of the foregoing amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. Applicants respectfully request entry, reconsideration, and allowance of all currently pending claims. The Examiner is invited to telephone the undersigned if there are any remaining issues.

RESPECTFULLY SUBMITTED,

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